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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/805,342	03/13/2001	Alan Anderson Hoover	PU010026	3707

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EXAMINER	
MICHALSKI, JUSTIN I	

ART UNIT	PAPER NUMBER
2644	

DATE MAILED: 10/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/805,342	HOOVER ET AL.	
	Examiner	Art Unit	
	Justin Michalski	2644	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *23 November 2004*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-9* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,2 and 5-8* is/are rejected.

7)☒ Claim(s) *3,4 and 9* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 23 November 2004 have been fully considered but they are not persuasive.

Applicants argue page 5, lines 3-4 that Eggers is not concerned with the object of reducing the "change in a total audio power generated, which a change in the mode of operation occurs". This is not persuasive as Eggers discloses a foreground and background program being selectively interchanged (i.e. reduce a change in total audio power generated). Applicant further argues that the present claimed invention provides for a "constant total audio power for the system regardless of the number of speakers being utilized thereby allowing for a smaller voltage drop across the output or driver stage of the amplifier and less power dissipation". This is not persuasive as it is not found in the claim language.

Applicants further argue regarding claims 5 and 6 that Meisenheimer and Morris do not disclose selectively applying a supply voltage to a first audio amplifier of said audio amplifiers at a lower magnitude, in a first mode of operation, when audio power generated in a second audio amplifier of said audio amplifiers is higher, and at a higher magnitude, in a second mode of operation, when the audio power generated in said second audio amplifier is lower. This is not persuasive as Eggers/Kaizer is used to teach this limitation.

2. The previous rejection stands as presented below.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1, 2, 7, and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Eggers et al. (Hereinafter "Eggers") (US Patent 5,910,996) in view of Kaizer et al. (US Patent 4,649,565).

Regarding Claim 1, Eggers discloses an audio reproduction apparatus (Figure 4), comprising: a plurality of audio amplifiers (52, 53, and 55), each being responsive to a corresponding audio signal (signals from switching circuitry 41 and mixer 54) for generating audio power in a corresponding audio speaker (speakers 40); and means for selectively applying a volume (volume select 44 to amplifier 52) of said audio amplifiers at a lower magnitude in a first mode of operation (Eggers discloses foreground and background music being interchanged, i.e. amplitude lower in background mode) (Column 2, lines 1-4), when audio power generated in a second audio amplifier of said audio amplifiers is higher (i.e. foreground level), and at a higher magnitude, in a second mode of operation, when the audio power generated in said second audio amplifier is lower (i.e. audio program is interchanged) (Column 2, lines 1-4), in a manner to reduce a change in a total audio power generated, when a change in the mode of operation occurs. Since Eggers does not disclose the volume being controlled by a supply

voltage, Kaizer is cited to teach that increasing or decreasing the power supply voltage results in an increase or decrease in the volume as stated Col. 8, lines 8-10 that it is possible to employ an amplifier having a supply voltage which depends on the drive level of the amplifier (i.e. volume) in order to increase efficiency of the device (Col. 8, lines 3-8). Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to use a supply voltage to control volume in order to produce a more efficient circuit as taught by Kaizer.

Regarding Claim 2, Eggers further discloses comprising means for selectively enabling audio power generation in said second audio amplifier, in said first mode of operation, and for disabling the audio power generation in said second audio amplifier, in said second mode of operation (Eggers discloses either (i.e. second amplifier) to be selectively muted) (Column 2, lines 5-7).

Regarding Claim 7, Eggers discloses a method for reproducing audio (Figure 4), comprising: providing a plurality of audio amplifiers (52, 53, and 55), each being responsive to a corresponding audio signal (signals from switching circuitry 41 and mixer 54) for generating audio power in a corresponding audio speaker (speakers 40); and selectively applying a supply voltage to a first audio amplifier (volume select 44 to amplifier 52) of said audio amplifiers at a lower magnitude in a first mode of operation (Eggers discloses foreground and background music being interchanged, i.e. amplitude lower in background mode) (Column 2, lines 1-4), when audio power generated in a second audio amplifier of said audio amplifiers is higher (i.e. foreground level), and at a higher magnitude, in a second mode of operation, when the audio power generated in

said second audio amplifier is lower (i.e. audio program is interchanged) (Column 2, lines 1-4), in a manner to reduce a change in a total audio power generated, when a change in the mode of operation occurs. Kaizer is cited to teach that increasing or decreasing the power supply voltage results in an increase or decrease in the volume as stated Col. 8, lines 8-10 that it is possible to employ an amplifier having a supply voltage which depends on the drive level of the amplifier (i.e. volume).

Regarding Claim 8, Eggers further discloses comprising steps of selectively enabling audio power generation in said second audio amplifier, in said first mode of operation, and disabling the audio power generation in said second audio amplifier, in said second mode of operation (Eggers discloses either (i.e. second amplifier) to be selectively muted) (Column 2, lines 5-7).

4. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Eggers as applied to claim 1 above in view of Meisenheimer (US Patent 4,560,838). Egger discloses an apparatus as stated apropos of claim 1 above but does not disclose a first supply voltage and a second supply voltage for controlling the power of an audio amplifier. Eggers does disclose volume control circuitries may comprise suitable analog or digital components, which are known (Column 5, lines 41-44). Meisenheimer discloses an apparatus (Figure 1) for controlling the power of an audio amplifier (amplifier 10) using two supply voltages (Variable Voltage A and B) by using switch 46 and variable resistors 26 and 28. Meisenheimer further discloses it provides controlled

switching to smoothly switch from one audio output to another (Column 1, lines 40-42). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include two voltage supplies for applying power to a amplifier to smoothly change between audio sources as disclosed by Meisenheimer.

5. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Eggers as applied to claim 1 above in view of Morris, Jr. et al. (Hereinafter "Morris") (US Patent 5,200,708). Eggers discloses an apparatus as stated apropos of claim 1 above but does not disclose both first and second power supplies from a common power supply. Morris discloses an audio reproduction apparatus having a plurality of amplifiers (18L, R, C, and S) along with a common power supply 24. It is well known in the art the power from a power supply can be fed to multiple devices in order to reduce the number of power supplies and cost of a device. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use a common power supply in order to reduce the complexity and cost of the apparatus.

Allowable Subject Matter

6. Claims 3, 4, and 9 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Justin Michalski whose telephone number is (571)272-7524. The examiner can normally be reached on M-F 7-3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vivian Chin can be reached on (571)272-7848. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JIM

October 14, 2005

VIVIAN CHIN
SUPERVISORY PATENT EXAMINER
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